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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,711	01/18/2002	Stan Wojciak	LC-465	6319

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LOCTITE CORPORATION  
Legal Department  
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EXAMINER

BERMAN, SUSAN W

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/050,711

Applicant(s)

WOJCIAK, STAN

Examiner

Susan W Berman

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 21024 12102
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_

Art Unit: 1711

*Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16-17 and 20-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no antecedent basis in claim 15 for the recitation in claim 16 of a fluorescent first color or for the recitation in claim 17 of the absence of fluorescence. With respect to claim 20 and claim 23, it is not clear how the step "detecting the absence of fluorescence" can be performed in the absence of a fluorescent material in the adhesive. The composition of claim 1 does not recite the presence of a fluorescent material that would provide fluorescence to be removed. There is no antecedent basis in claim 23 for the recitation of a "fluorescent adhesive" in claim 24.

*Claim Rejections - 35 USC § 102 or § 103*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 1711

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 11-13, 15-17 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Trom et al (6,444,725). Trom et al disclose color-changing dental compositions that have an initial color prior to exposure to actinic radiation and a final color that is different from the initial color subsequent to the composition being exposed to actinic radiation. See column 3, line 51, to column 4, line 68, especially column 4, lines 63-68, column 5, line 42, to column 6, line 30, and column 10, lines 50-65. Xanthene dyes or anthraquinone dyes may be added as sensitizers (column 7, line 23, to column 8, line 11).

Claims 6, 10, 13, 14 and 18 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Trom et al. Trom et al teach suitable colorants that include fluorescein and fluorescein derivatives as being particularly preferred (column 4, lines 63-67). Xanthene dyes and anthraquinone dyes as sensitizers are also taught. Thus Trom et al disclose compositions comprising the dyes set forth in instant claims 6, 7, 10, 13, 14 and 18. Alternatively, with respect to claim 6, It would have been obvious to one skilled in the art at the time of the invention to employ anthraquinones or xanthenes as sensitizer, as taught by Trom et al. One of ordinary skill in the art at the time of the invention would have been motivated by a reasonable expectation of success. Alternatively, with respect to claims 7, 10, 13, 14 and 18, It would have been obvious to one skilled in the art at the time of the invention to select fluorescein or fluorescein derivatives as the colorant because Trom et al teach that these colorants are particularly suitable.

Claims 1-5, 11-12, 15, 17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Field et al (5,302,627) Field et al disclose a method for indicating the cure point of UV curable compositions by color change. A dye with visible color is added to compositions comprising

Art Unit: 1711

(meth)acrylate compounds. See the Abstract, column 3, column 12, line 41, to column 18, line 31, column 19, lines 19-30, and columns 26-27.

Claims 6, 8 and 9 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Field et al. Anthraquinone dyes and azo dyes are disclosed. Field et al teaches using 10-30 ppm of visible dye and from 0 to 0.15 wt. % of a fluorescent dye. Compositions comprising anthraquinone dyes as taught by Field et al anticipate claim 6. Alternatively, It would have been obvious to one skilled in the art at the time of the invention to select anthraquinone dyes from the visible dyes taught by Field et al. One of ordinary skill in the art at the time of the invention would have been motivated by a reasonable expectation of success because several anthraquinone dyes are used in the Examples. With respect to claims 8 and 9, compositions comprising a visible dye and a fluorescent dye would be expected to provide amounts with the ranges set forth in claims 8 and 9. Alternatively, It would have been obvious to one skilled in the art at the time of the invention to employ a very small amount of fluorescent dye as suggested by Field et al. anticipating the amounts set forth in claims 8 and 9.

Claims 20 and 22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Neckers et al (5,606,171). Neckers et al disclose a method for determining thickness, degree of cure and other properties of polymeric coatings or films using a fluorescent probe. Acrylate-functional compositions are disclosed. The method requires measuring changes in fluorescent intensity. See column 6, line 56, to column 7, line 10, column 7, lines 37-43, column 8, lines 22-67, and Figure 8.

*Allowable Subject Matter*

Claim 21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and

Art Unit: 1711

any intervening claims. Neckers et al '171, which is considered to be closest prior art to the method set forth in instant claim 20, does not teach or suggest a fluorescent dye selected from fluorescein and one of the fluorescein derivatives set forth in claim 21.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Neckers et al (5,677,107) disclose fluorescent probes such as xanthene dyes or fluorescein and teach that the compounds produce a color change in response to a change in the ionic character of a matrix. Neckers et al teach compositions comprising a photoresponsive agent and selectively irradiating the composition to cure it and then to color it. However, Neckers et al do not teach color change upon curing.

Neckers et al (6,200,646) disclose compositions comprising acrylate materials and a colorless color precursor, such as a lactone dye. The compositions become polymerized and colored upon irradiation.

Dunn et al (4,581,427) disclose adhesive compositions comprising (meth)acrylate compounds and method wherein the composition obtained by mixing two components produces a color change and curing of the composition is accompanied by a color change. See column 1, lines 47-54, column 2, lines 15-43, column 3, lines 26-34, and column 4, lines 23-43. However, Dunn et al do not teach compositions comprising a dye.

Petisce (5,933,559) discloses adding a chromophoric indicator to a radiation curable composition, such as (meth)acrylate compositions, that becomes substantially colorless when exposed to a level of radiation sufficient to cure the composition.

Art Unit: 1711

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan W Berman whose telephone number is 703 308 0040. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 703 308 2462. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0661.



Susan W Berman  
Primary Examiner  
Art Unit 1711

SB  
September 4, 2003